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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,537	09/26/2001	Jonathan Lacey	10004238-1	3740

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EXAMINER

PETKOVSEK, DANIEL J

ART UNIT PAPER NUMBER

2874

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,537

Applicant(s)

LACEY, JONATHAN

Examiner

Daniel J Petkovsek

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment received on September 4, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 9, and 11-20 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on September 2, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

This office action is in response to the amendment received September 4, 2003. In accordance with the amendment, claims 1, 10, 15, and 18 have been amended, and claims 4-7 have been canceled.

Drawings

1. The corrected drawings were received on September 2, 2003. These drawings are acknowledged as fixing the problem with duplicate reference numerals.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 8, 9, and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahori et al. U.S.P. No. 5,896,213, and further in view of Geile et al. U.S.P. No. 6,336,201.

Nagahori et al. U.S.P. No. 5,896,213 teaches (ABS, Figs. 2, 4, and 5, summary, claim 1) an optical fiber network system comprising: an optical transmitter 6 for broadcasting an optical signal to a plurality of optical receivers 31-3N; an array optical fiber cable element 5 having a plurality of individual fibers 51-5N corresponding to the end user; and a branching point 4 (splitter 1xN star connection) which branches the signal to the user. Nagahori et al. '213 does not explicitly teach that the branch point 4 includes a tree of 1x2 splitters. However, this claim limitation is viewed as a non-narrowing limitation. Since the claim reads, "wherein the number

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N of individual fibers corresponds to the number of end users...”, a tree of 1x2 splitters would not narrow the claim, since each *individual* fiber is designated for a *corresponding* end user. Any split signal from N fibers could only be broadcasted to the N end users. Thus, a tree of 1x2 splitters would render the claim meaningless if these split signals were intended for any user besides the user corresponding to the individual fiber as claimed.

Regardless, 1x2 splitters are well-known arrangements of optical networks since they create a greater number of signals to transmit to the customer/user. Geile et al. U.S.P. No. 6,336,201 teaches (column 21, line 60 through column 22, line 6) a fiber cable transmission system that transmits optical signals to users by use of a branching point, in which it is taught that a tree of cascaded splitters can be used in any optical transmission network in order to further multiply the number of duplicated optical signals and thus increase the remote units serviceable by a single transmission signal. Any tree arrangement (1x2, 1x3, etc) would have been reasonably suggested.

Since Nagahori et al. '213 and Geile et al. '201 are both from the same field of endeavor, the purpose of splitting the optical signal into a plurality of usable optical signals for desired end users, as disclosed by Geile et al. '201, would have been recognized in the pertinent art of Nagahori et al. '213.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a tree of splitters (such as 1x2, or other splitters) in the branching point of Nagahori et al. '213 for the purpose of sending this optical signal to a greater plurality of end users for the purpose of broadcasting the signal to more users for more economic growth capabilities.

Regarding method claims 18-20, the method for broadcasting information is inherent from the optical network.

Allowable Subject Matter

4. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The relevant prior art does not teach or reasonably suggest an additional 1x2 element, wherein two outputs are connected further to two cables, in which the second cable provides route diversity.

Response to Arguments

5. Applicant's arguments received September 4, 2003, have been fully considered but they are not persuasive. Applicant traverses the obvious rejection to 35 U.S.C. 103 (a) to Nagahori et al. '213 by asking the examiner to produce evidentiary support that a tree of 1x2 splitters can be used at a branch point in order to split signals to a greater plurality of users. The examiner has addressed this issue, of using a tree of 1x2 splitters at a branch point in order to split signals for the purpose of providing more signals to end users. This issue has been fully addressed above, with the discussion of Geile et al. '201. It is noted, however, that this amendment has not narrowed the scope of the claims, since each *individual* fiber of the fiber optic cable is designated for a *corresponding* end user. Thus a tree of splitters would create more optical signal that are possible for the end users.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Beierle et al. U.S.P. No. 6,538,781 teaches (ABS, column 2, line 58 through column 3 line 3) teaches a system for distributing multimedia information from a central office to a plurality of customers with a dedicated optical fiber for the signal. Beierle et al. '781 teaches the use (column 2 line 58 through column 3) a tree-and-branch delivery system to the end user in order to increase the amount of signal sent.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

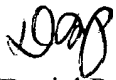
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (703) 305-6919. The examiner can normally be reached on M-F 8:30-5:00. After January 12, 2004, the new phone number of the Examiner will be (571) 272-2355.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9321.



Daniel Petkovsek
November 24, 2003



Brian Healy
Primary Examiner